



A PRACTICAL GUIDE TO WOOD GRINDING OPTIMIZATION

**Improve throughput. Achieve consistent particle size.
Make every process step count.**

Wood grinding performance affects more than the material leaving the mill. It influences production capacity, downstream processing, and the consistency of the finished product.

Whether you're preparing wood waste for further processing, grinding biomass for pellet production, or optimizing an existing size-reduction system, the right combination of feedstock management, screen selection,

equipment configuration, and maintenance can make a measurable difference.

Schutte Hammermill and CSE Bliss bring decades of size-reduction experience to the challenges of industrial wood grinding.

This guide outlines five practical areas to evaluate when looking to improve grinding performance.

5 Ways to Optimize Wood Grinding Performance

1 Match Screen Selection to Your Target Particle Size

The screen plays a critical role in determining the finished particle size. Choose a screen that meets your specification without grinding finer than necessary.

PRO TIP: Start with the particle size your downstream process requires.

2 Evaluate Your Feedstock

Wood species, moisture content, particle dimensions, and material consistency all affect grinding performance.

PRO TIP: Keep feedstock as consistent as practical, and monitor moisture content when investigating changes in throughput or particle size.

3 Select the Right Hammer Configuration

Hammer design, arrangement, and condition influence how material is reduced inside the mill.

PRO TIP: Review hammer condition and configuration when performance changes, wear increases, or your application requirements evolve.

4 Balance Throughput and Finished Particle Size

Maximum production rate isn't always the same as optimal performance. Grinding too finely can increase energy use and reduce throughput, while material that's too coarse may create problems downstream.

PRO TIP: Establish a target particle-size range and measure throughput against that requirement.

5 Keep Wear Parts and Maintenance on Schedule

Worn hammers, damaged screens, and inconsistent maintenance can affect grinding performance, particle size, and equipment availability.

PRO TIP: Inspect wear components regularly, track replacement intervals, and investigate unexplained changes in production rate or particle-size consistency.



Wood Grinding Optimization Checklist

Use these questions to identify opportunities for improvement:

- ☐ Are we consistently achieving our target particle size?
- ☐ Is our screen selection appropriate for the application?
- ☐ Have we evaluated feedstock moisture and consistency?
- ☐ Are hammers and screens in good condition?
- ☐ Are we tracking throughput and production variability?
- ☐ Does our grinding system meet the demands of our downstream process?
- ☐ Has our application changed since the equipment was selected?

Performance Starts with the Right Approach

Every wood grinding application has its own requirements. Feedstock characteristics, target particle size, production goals, and downstream processes all influence the equipment configuration best suited to the job.

Schutte Hammermill and CSE Bliss offer decades of experience in industrial size reduction and wood-processing.

Have an wood grinding application to evaluate?

Connect with our team to discuss your material, target particle size, throughput requirements, and equipment needs.

